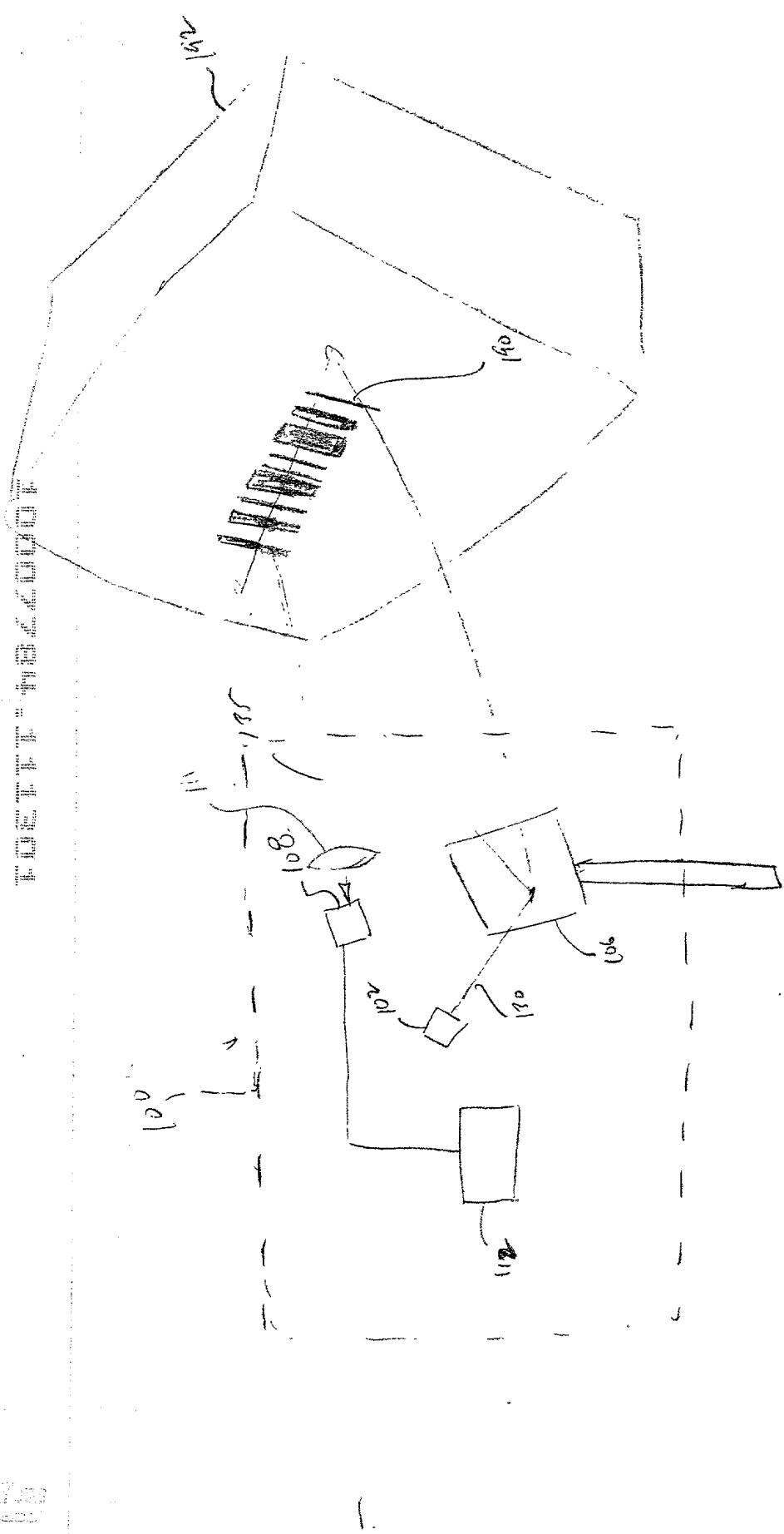
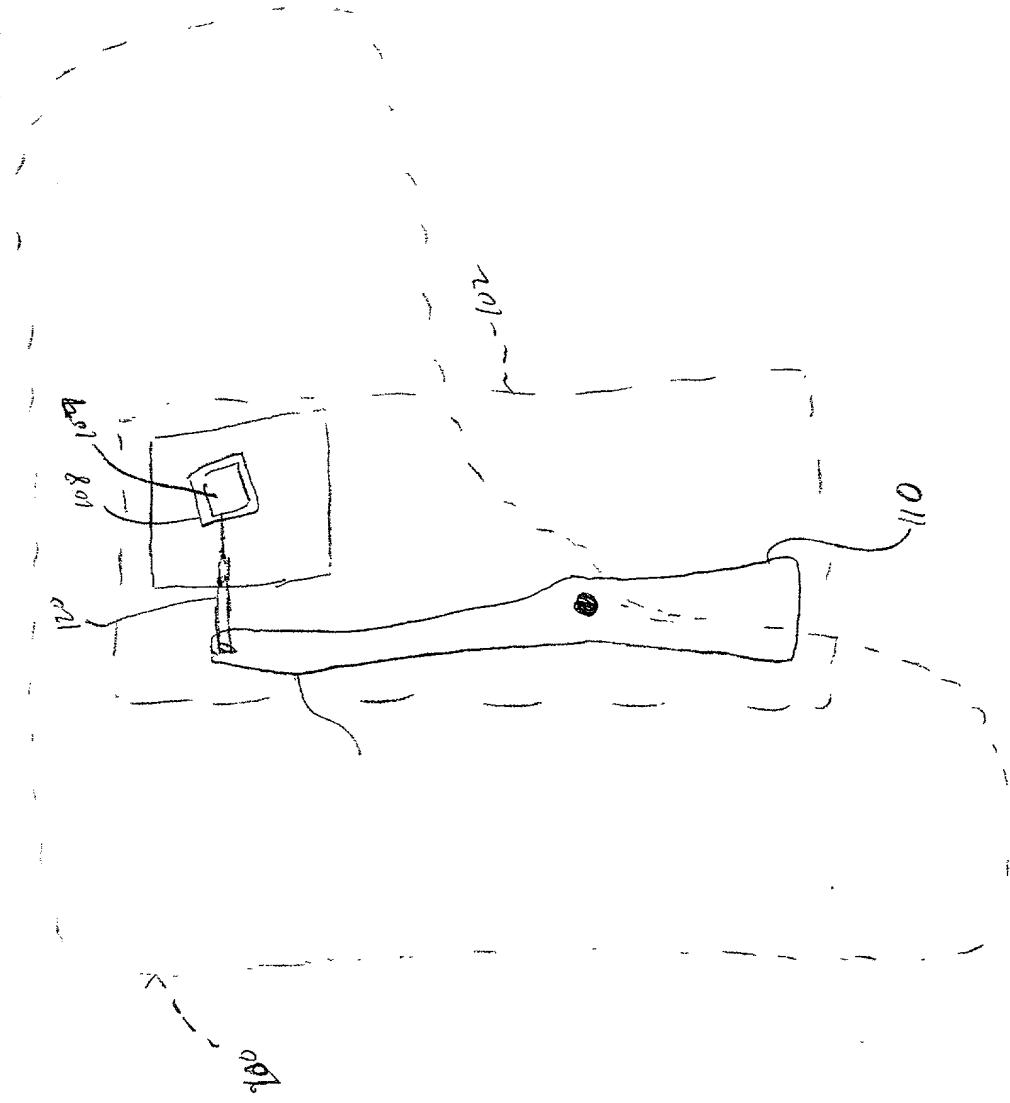


Fig. 1

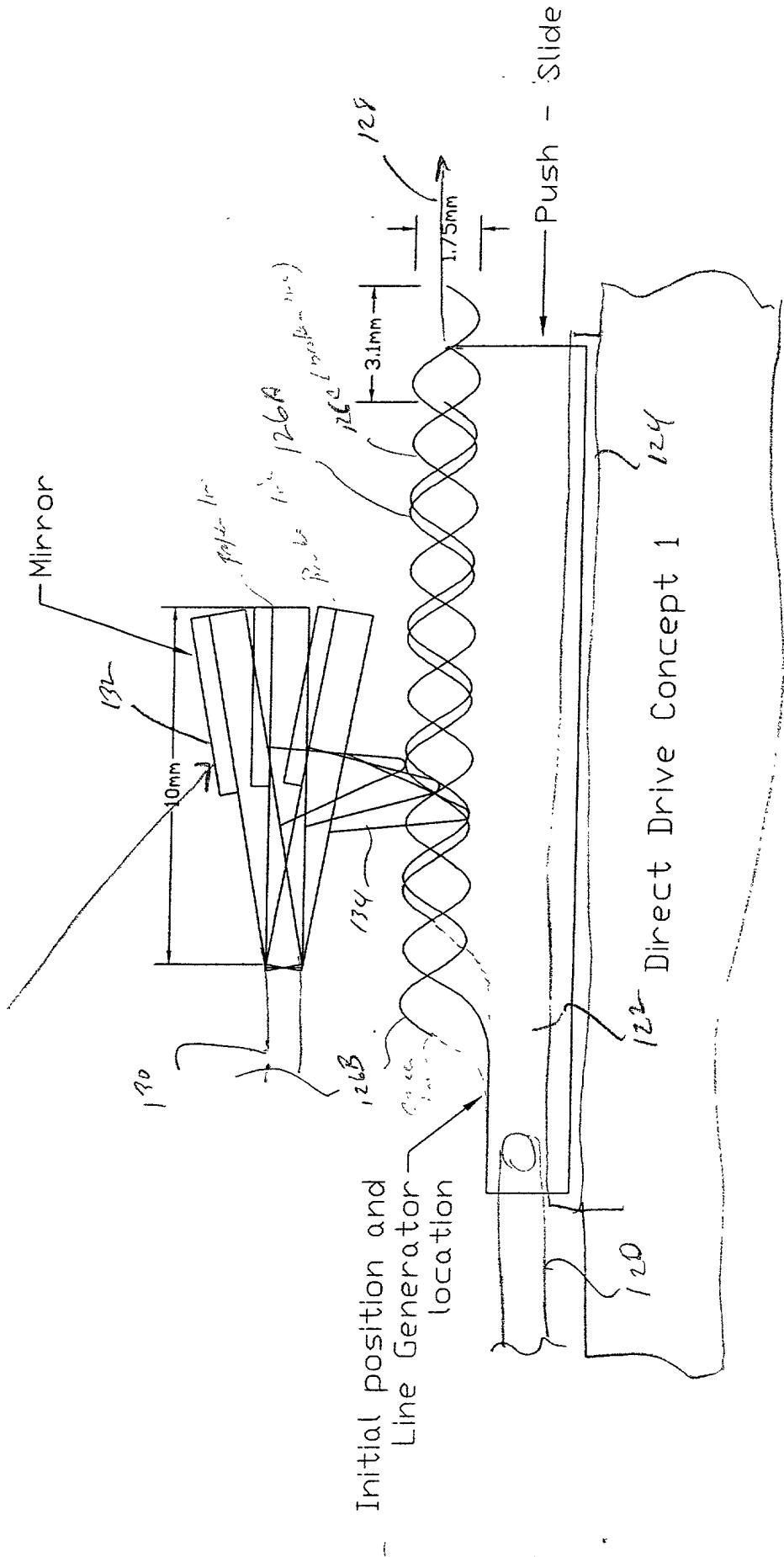


400 300 200 100 0

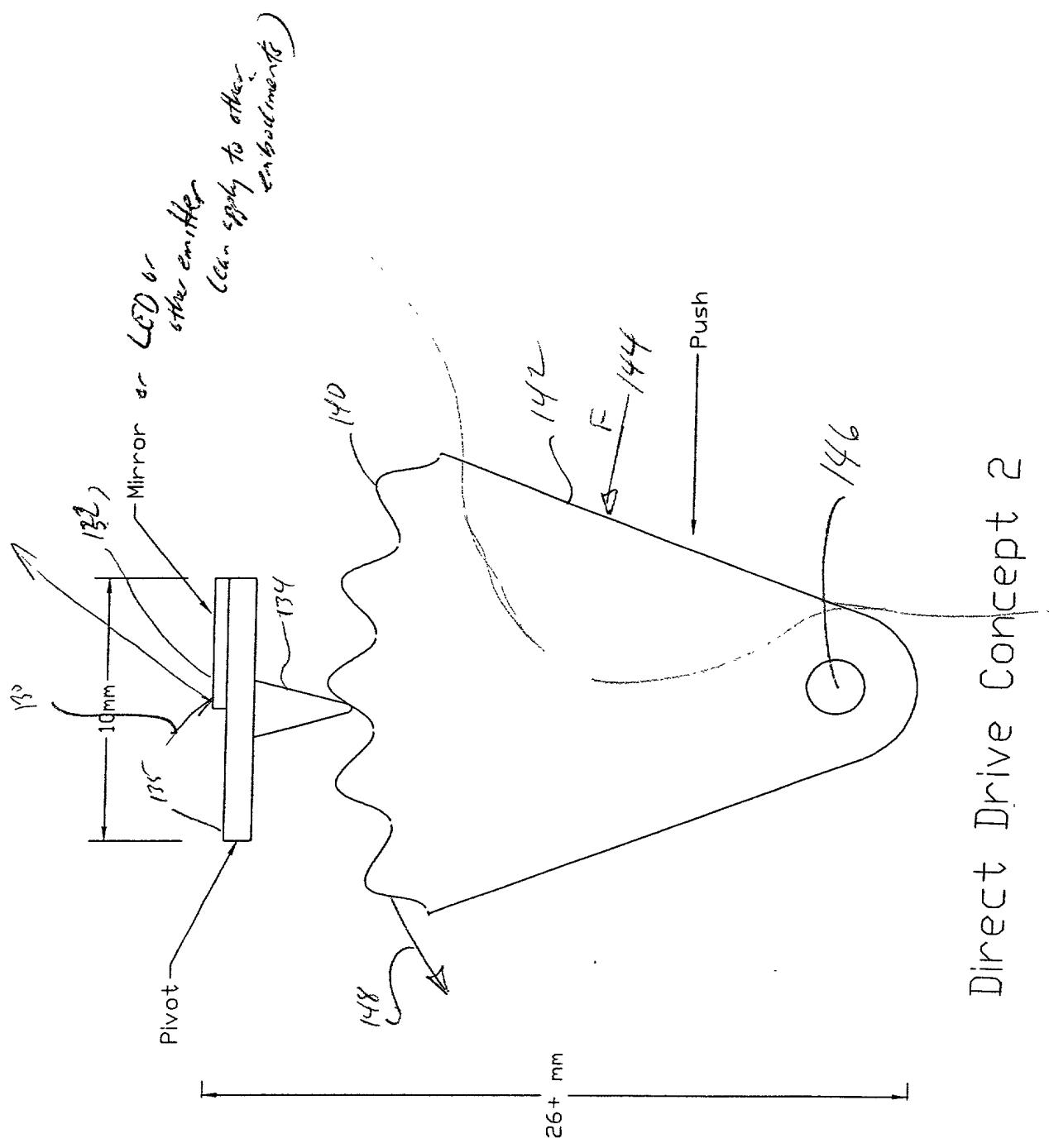


F16 2

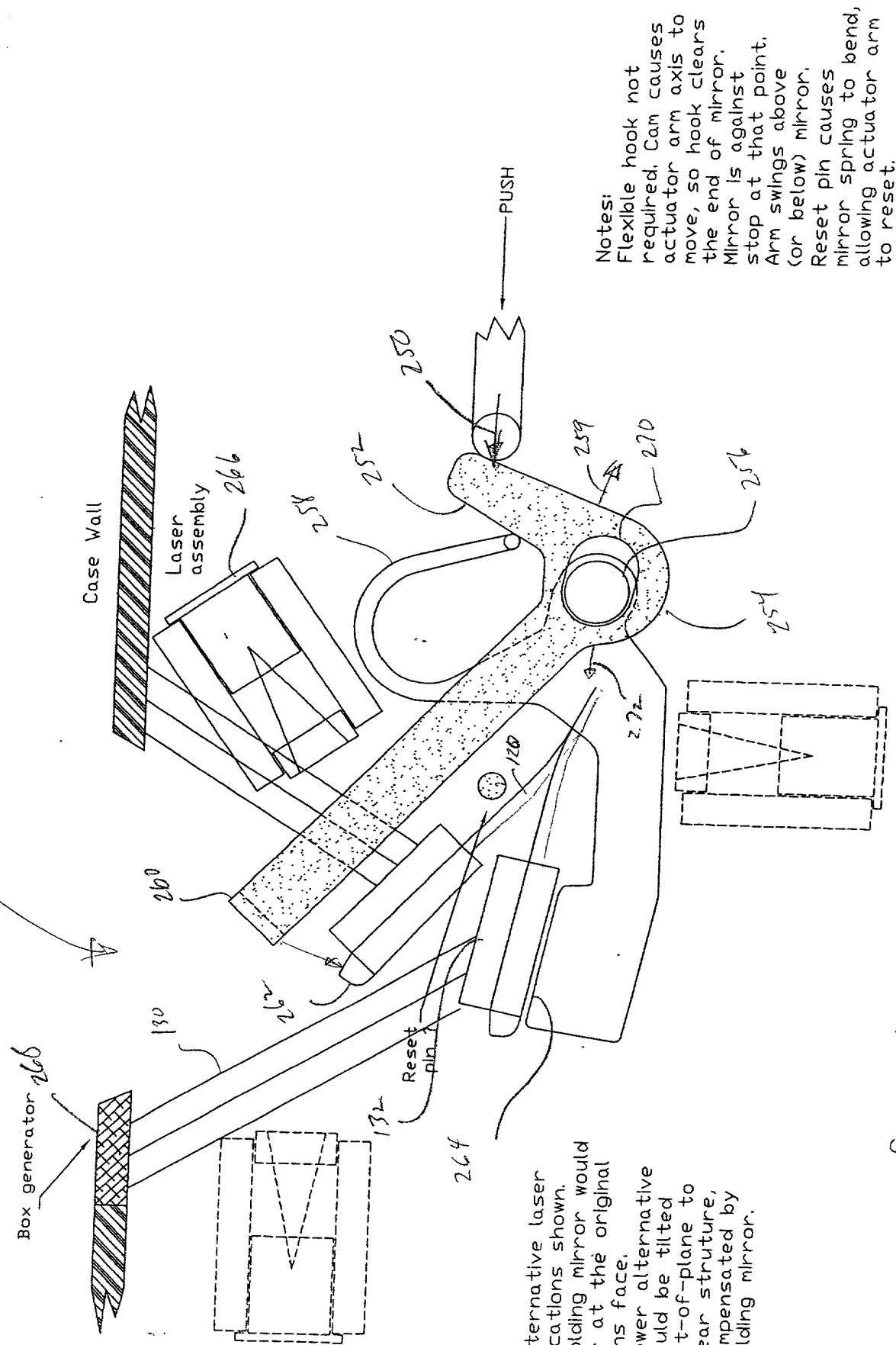
1916-17



## Direct Drive Concept 2

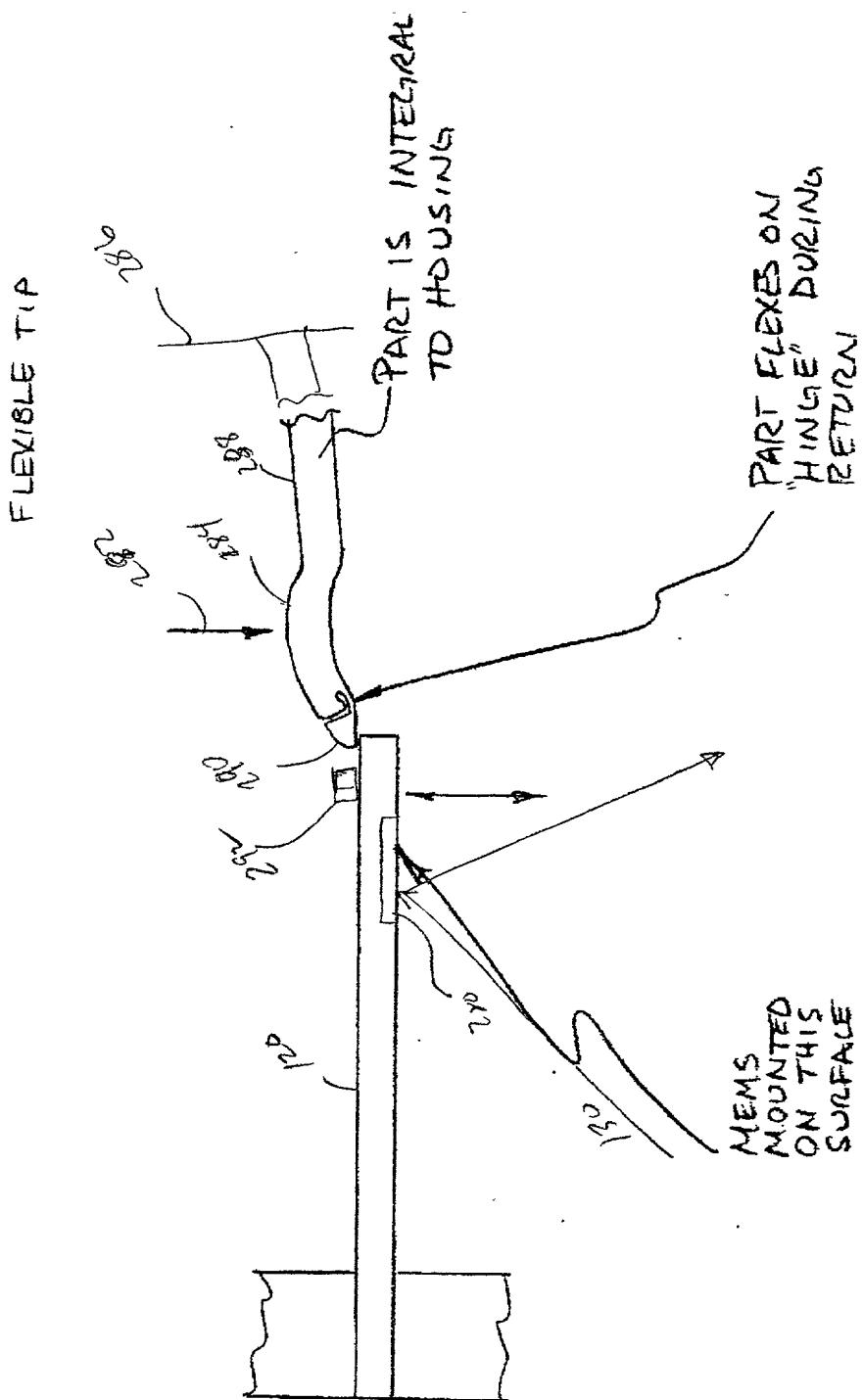


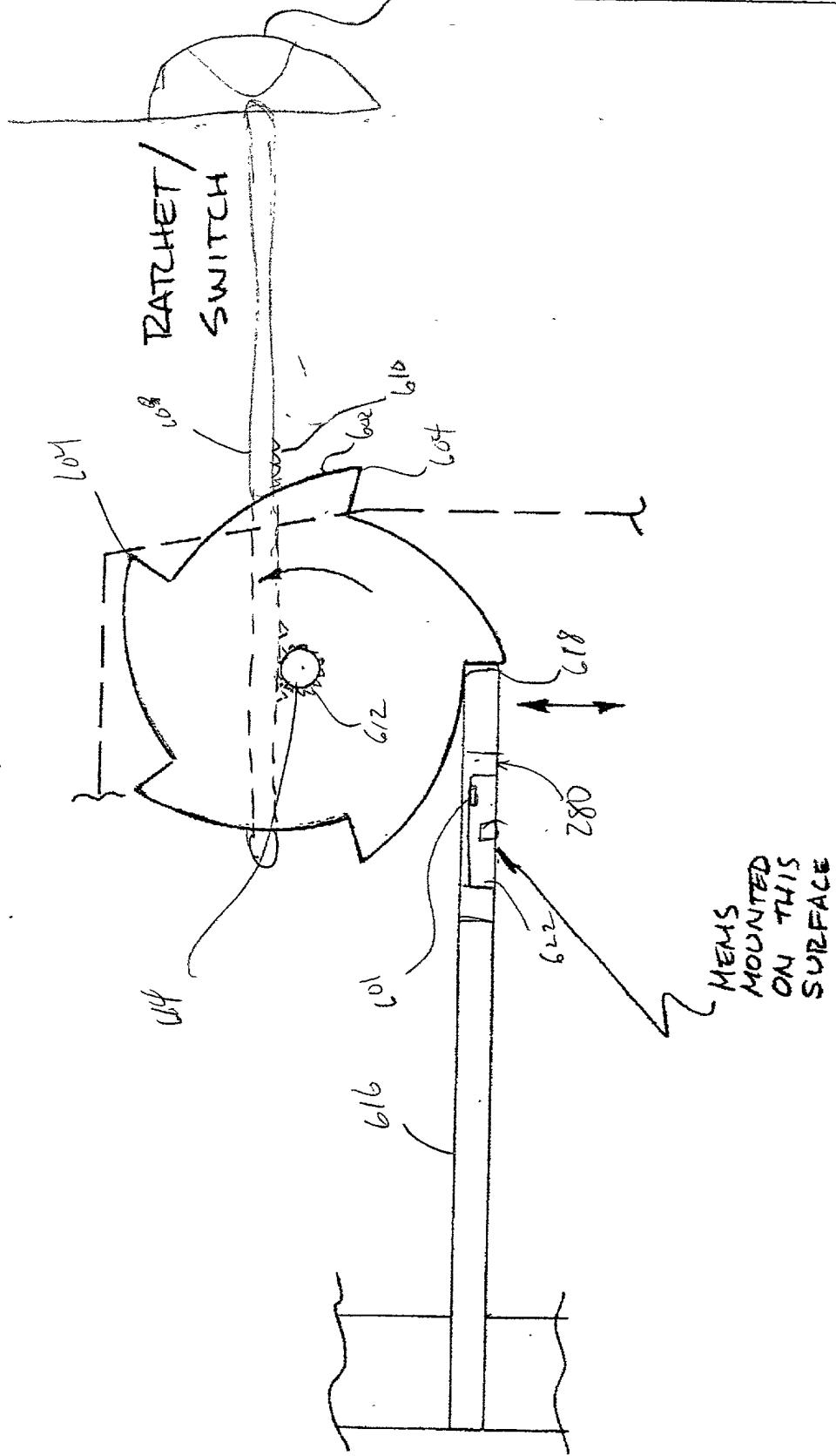
194  
195  
196  
197  
198  
199  
200



Concept for Another Simplified Oscillating Whiskey

F16.6

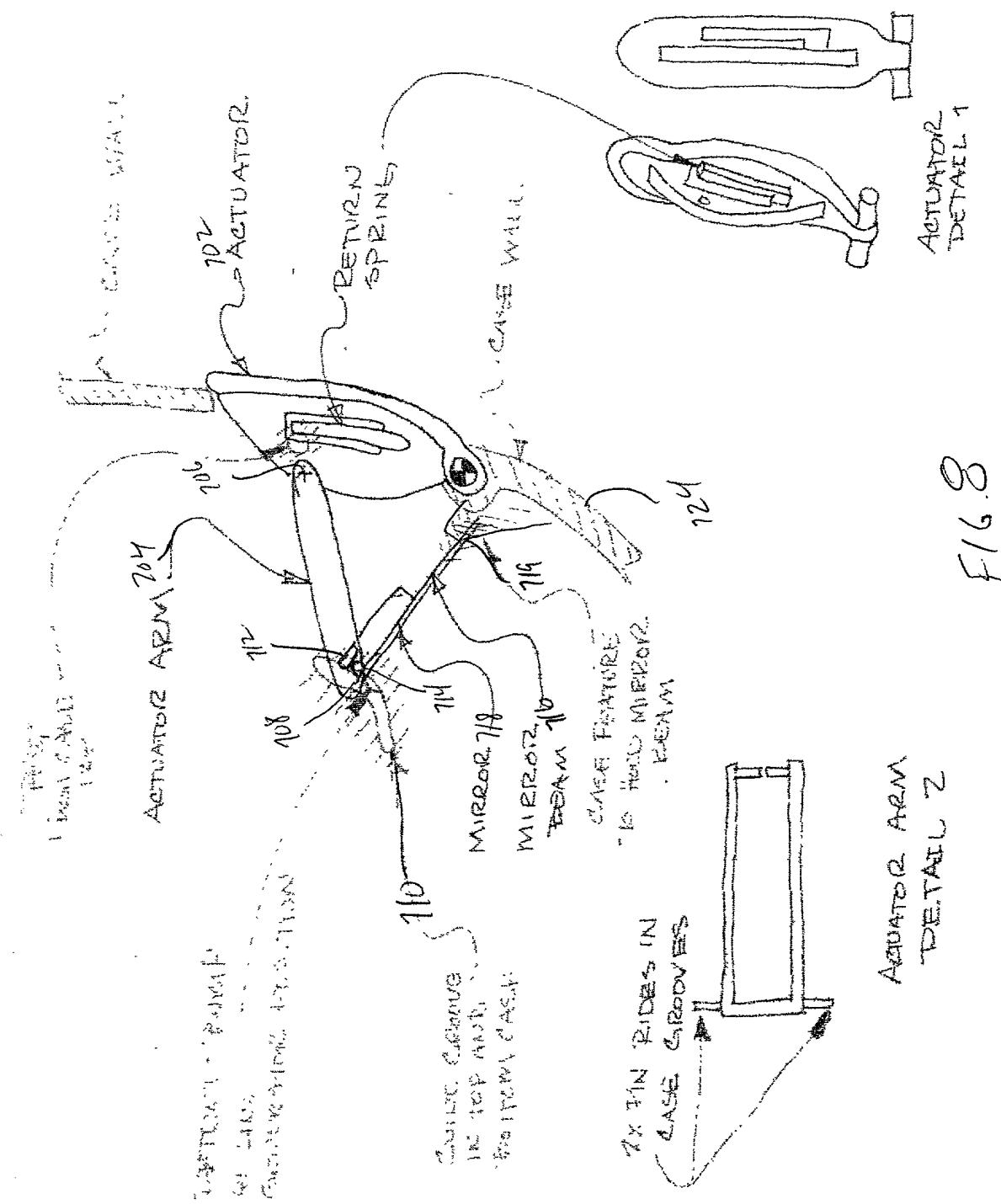




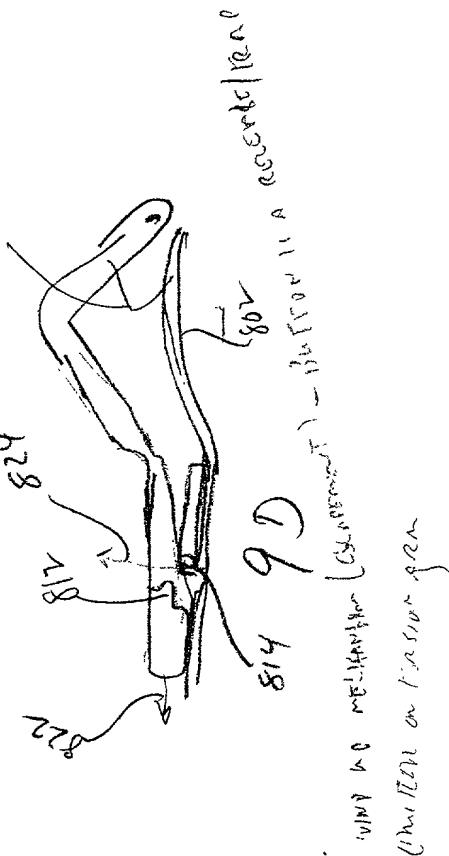
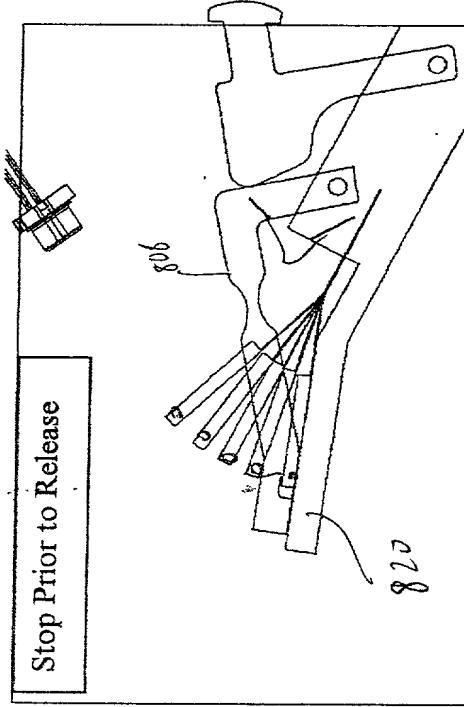
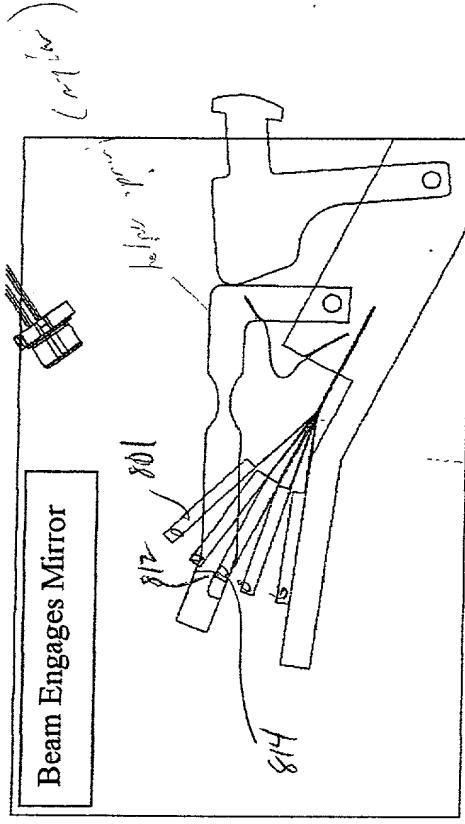
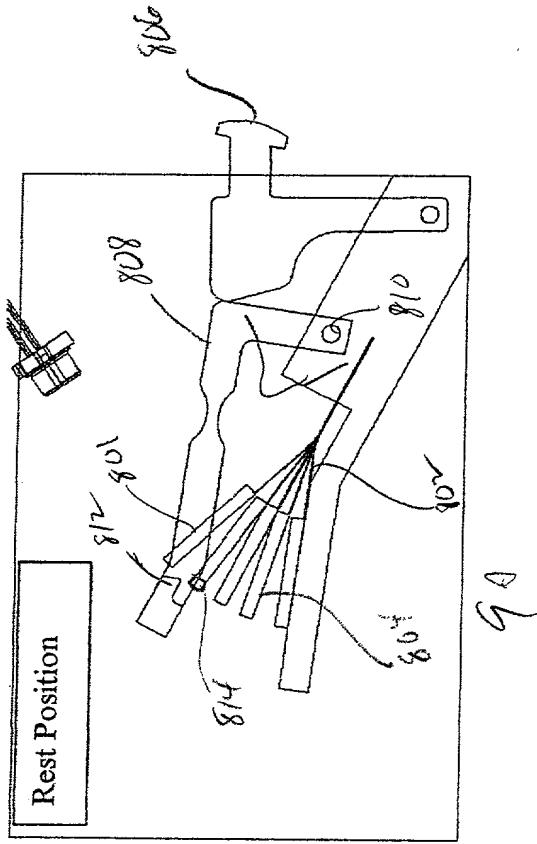
F16.7

# Alternate Whiskey

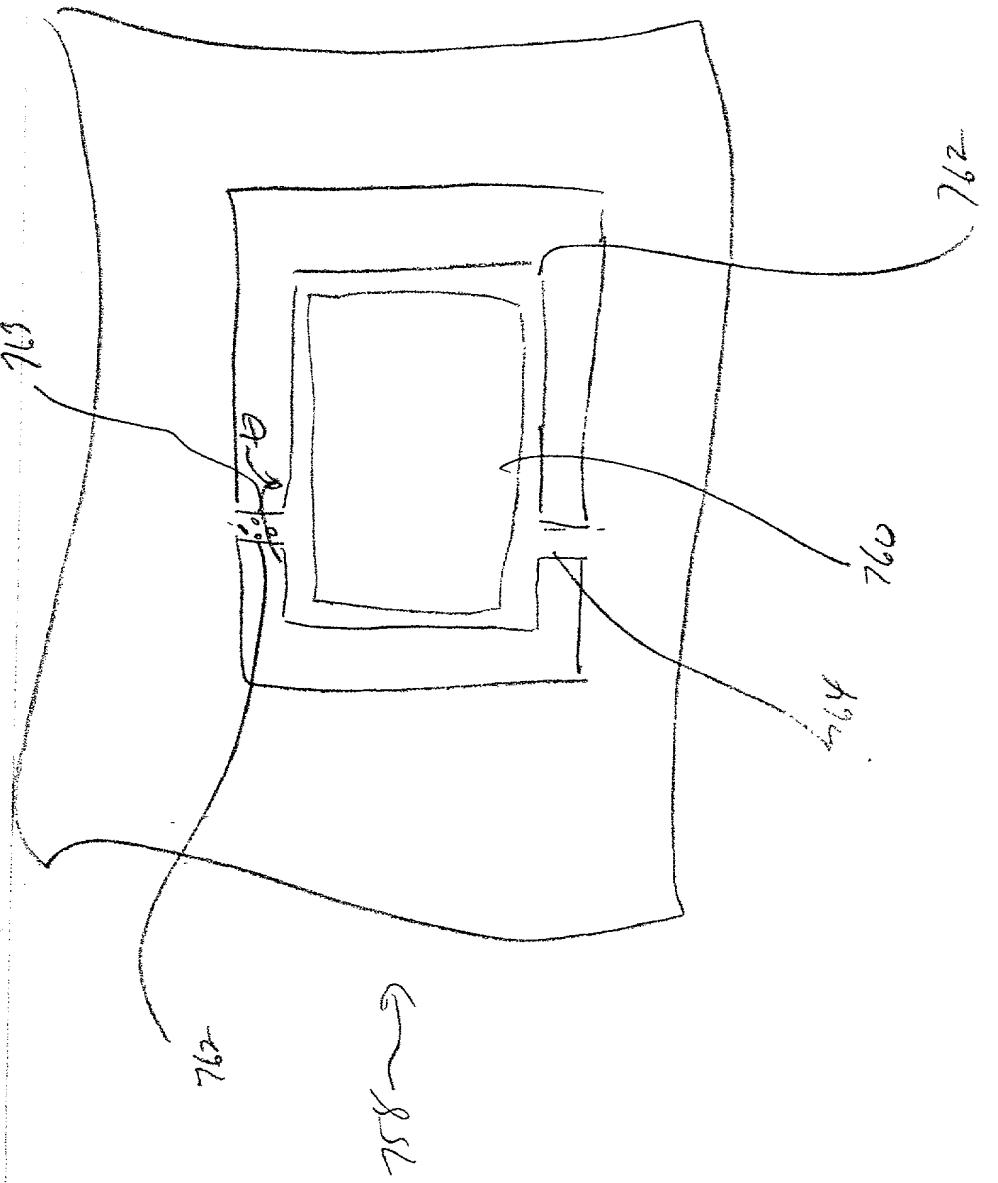
W. D. G. T. E. - W. S. C. T. G. T.



## Simplified Whiskey With Independent Beam



169 168 167 166 165



F 16. #0

650-552-4396

1000 1000 1000 1000 1000

650-552-4396

902

902

90

9/2

900

900

900

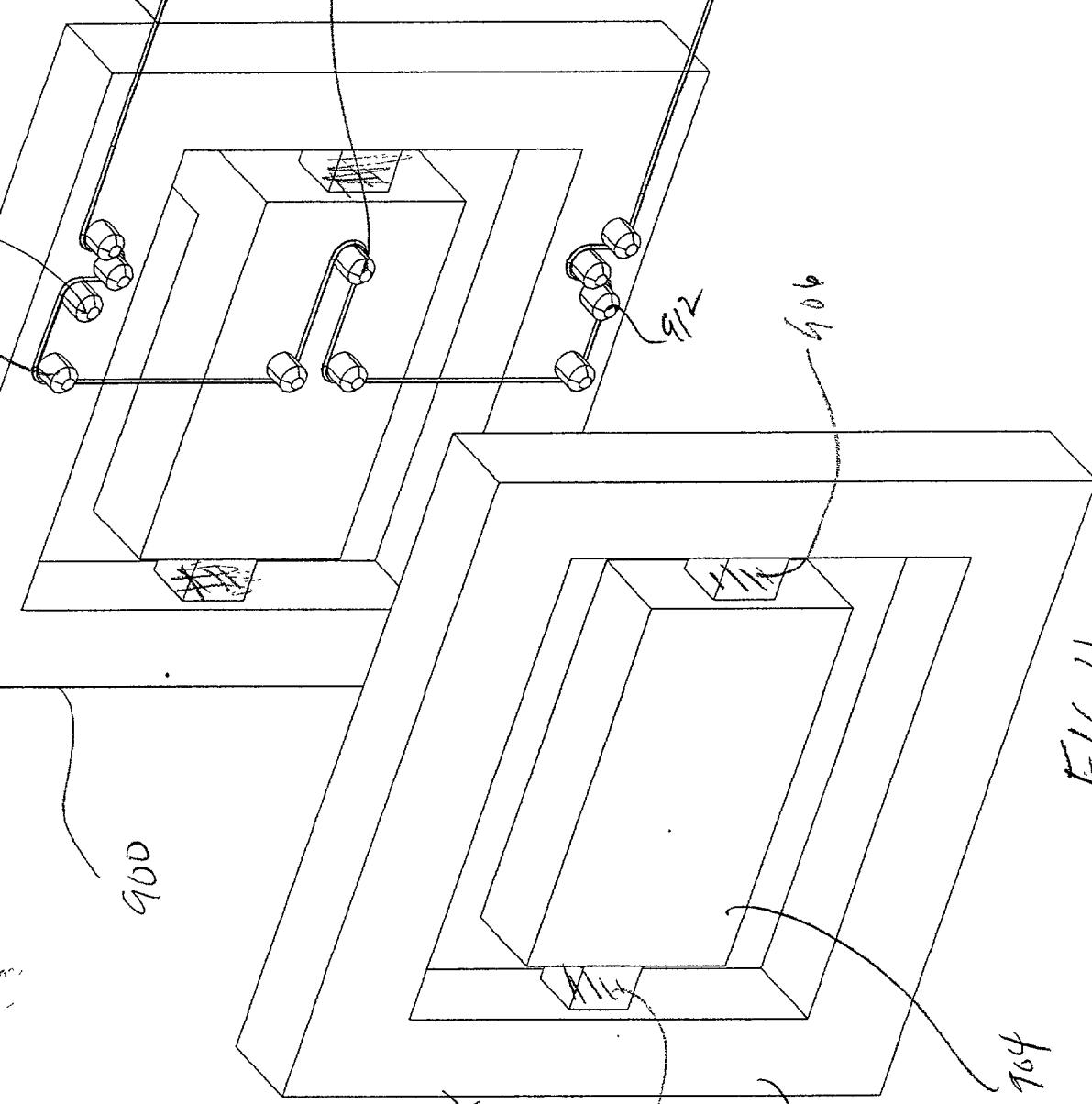
900

902

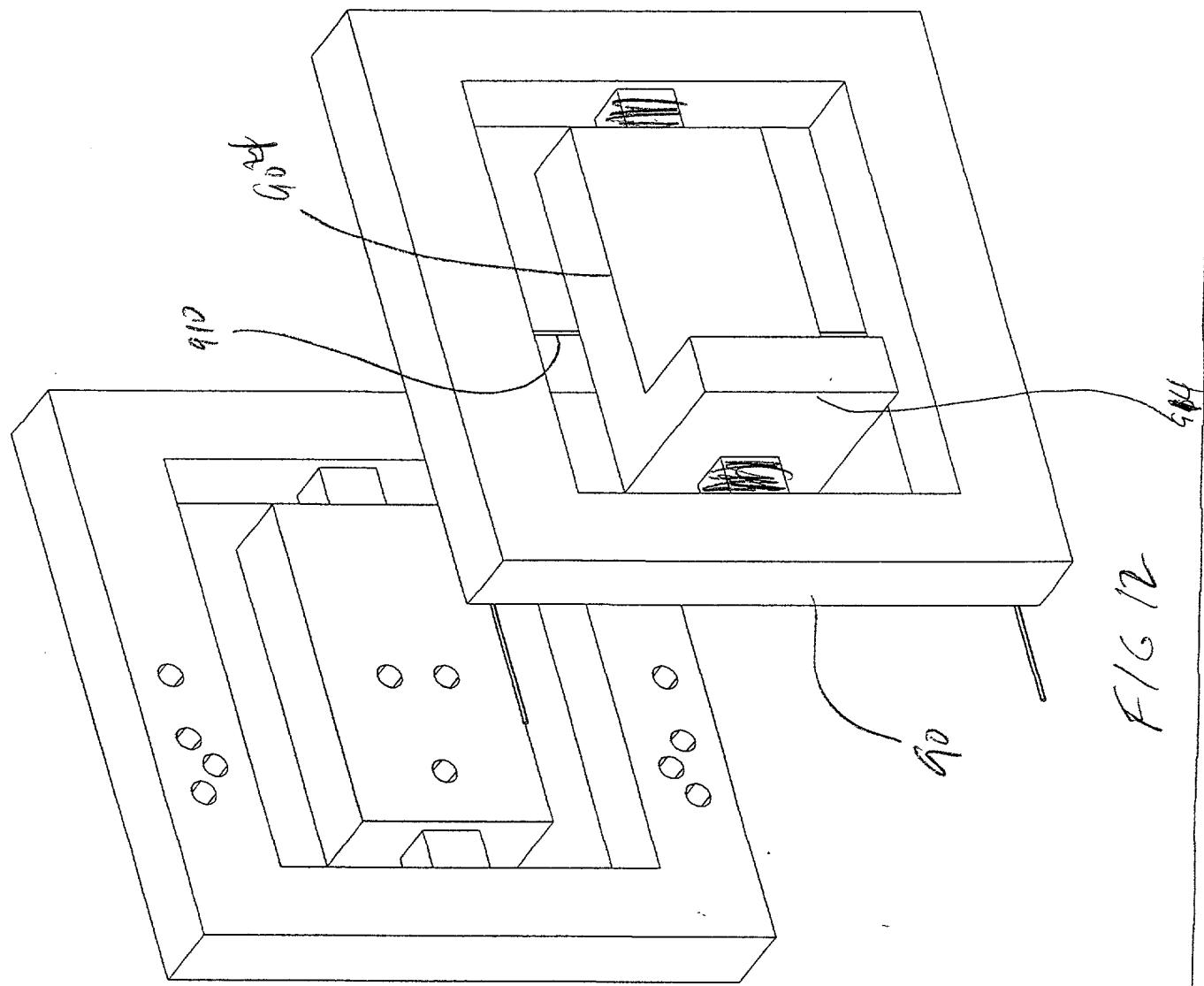
704

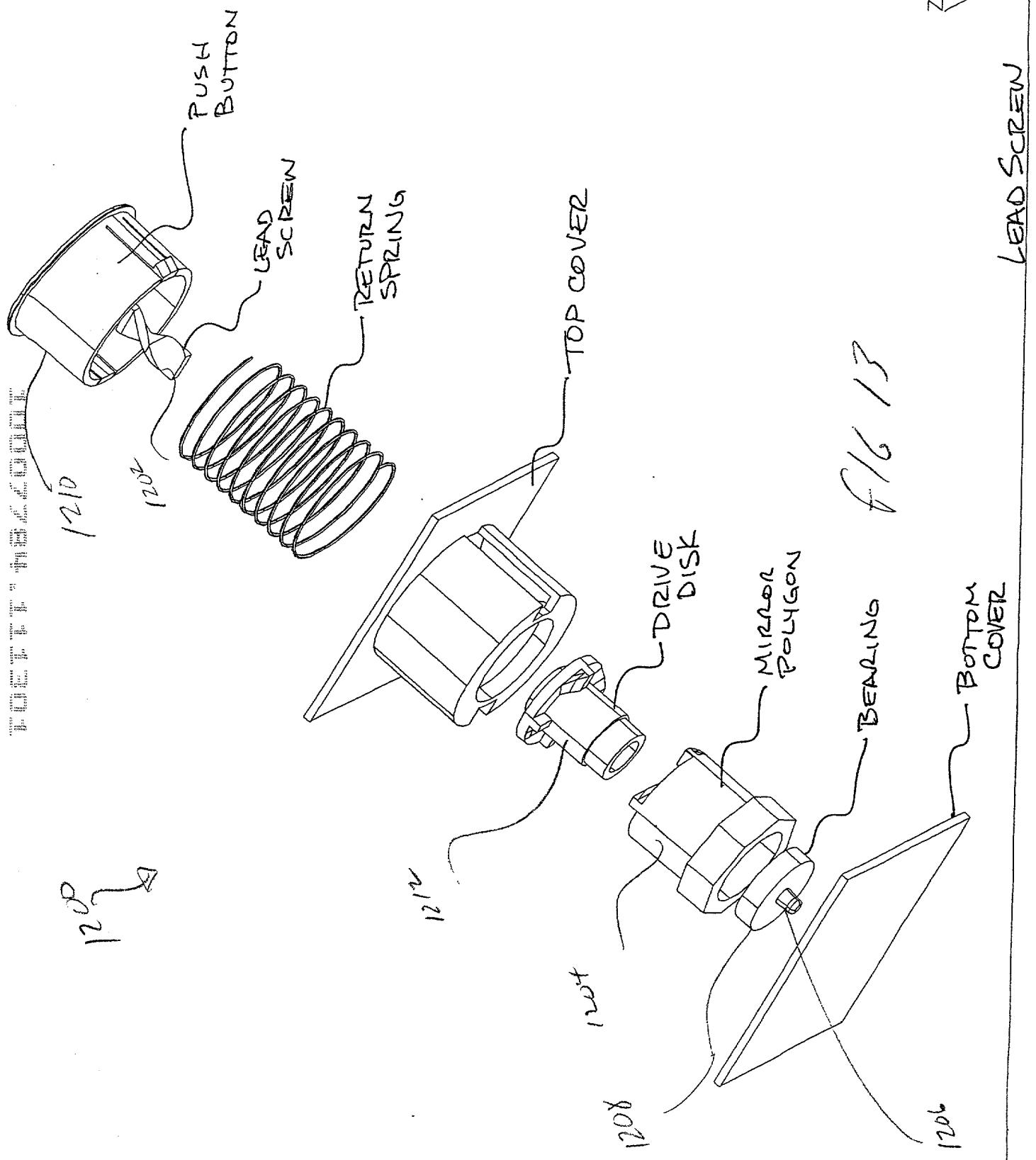
F16 11

904

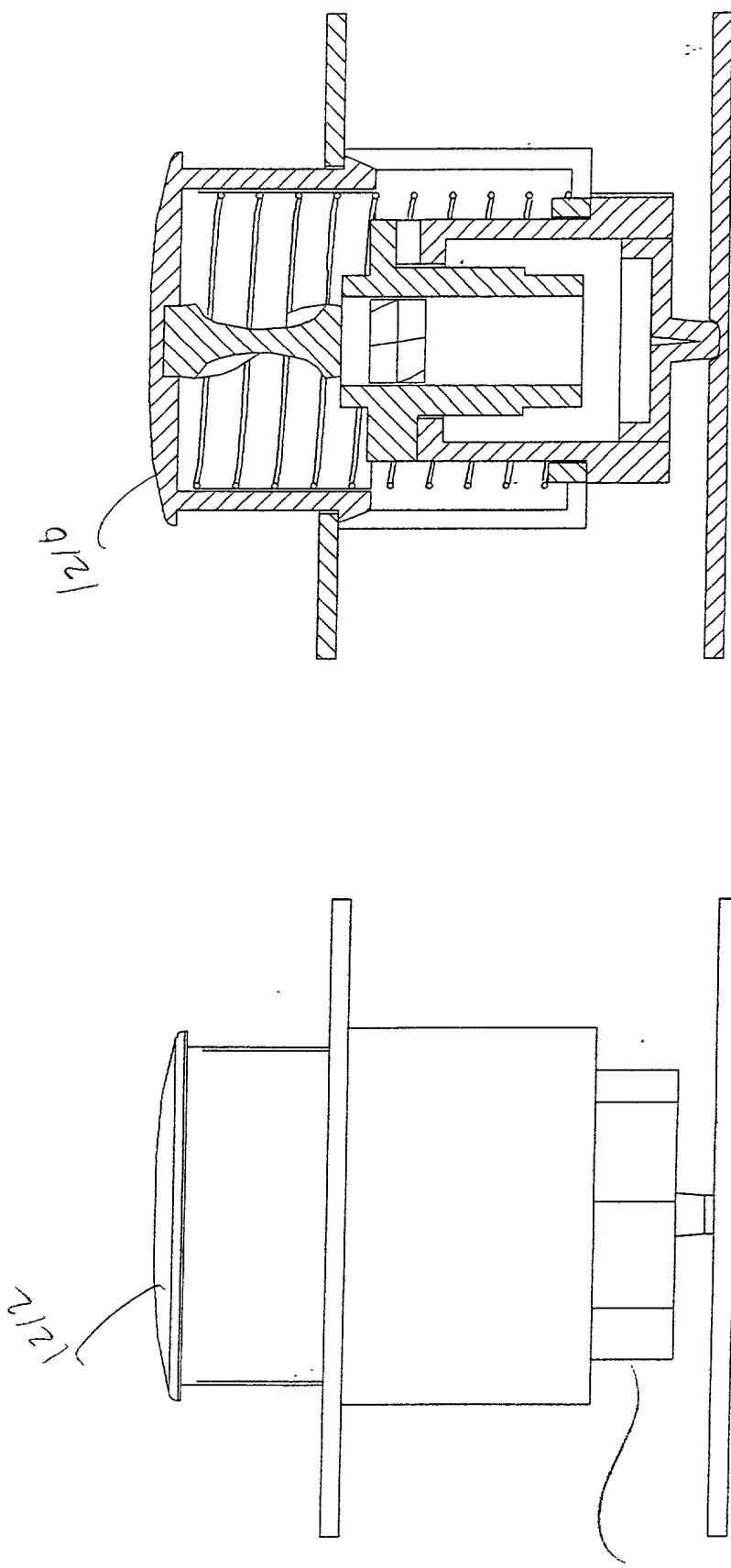


W. 10 8 6 4 2 0 8 6 4 2 0 8 6 4

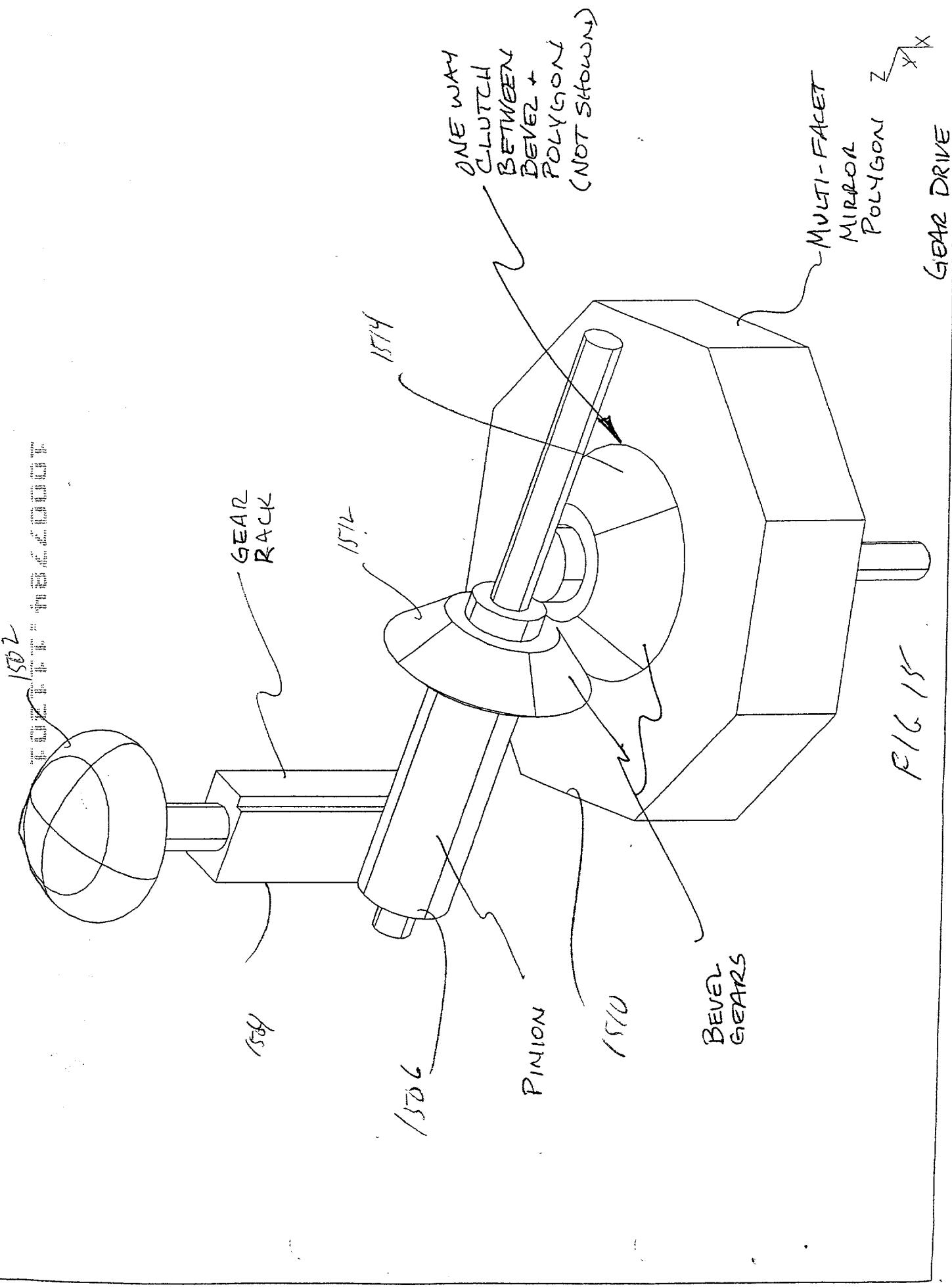




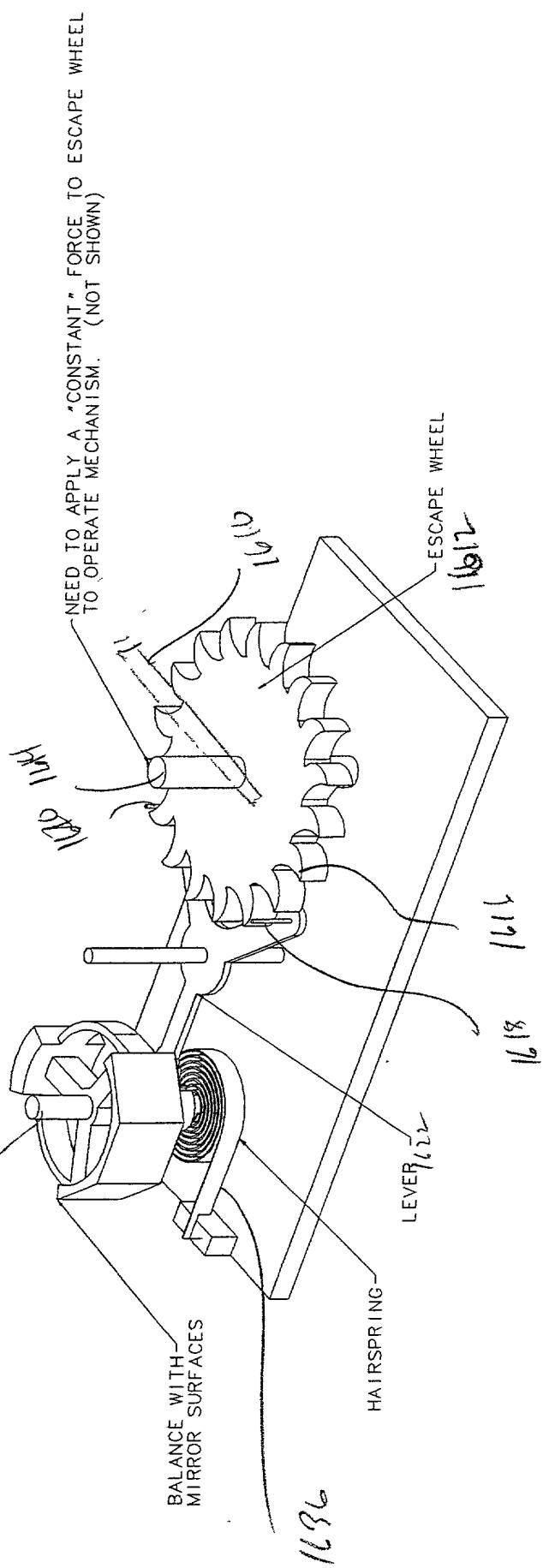
LEAD SCREW



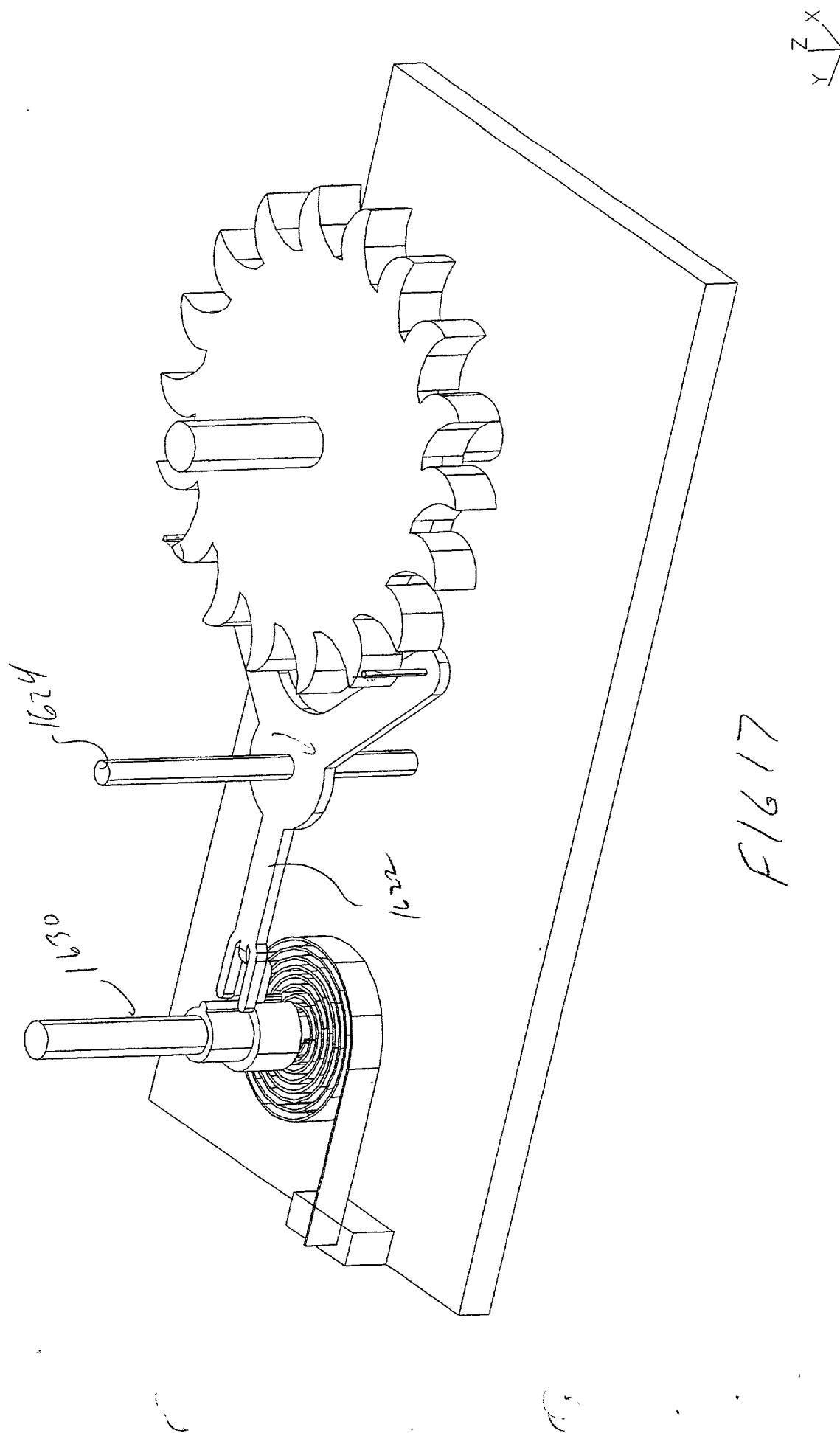
F16.14



A CONSTANT FORCE IS APPLIED TO THE ESCAPE WHEEL. THE ESCAPE WHEEL PROVIDES AN IMPULSE TO THE BALANCE THROUGH THE LEVER, CAUSING THE BALANCE/HAIRSPRING TO OSCILLATE. EACH OSCILLATION OF THE BALANCE CAUSES THE LEVER TO ROTATE WHICH IN TURN ALLOWS A SINGLE TOOTH OF THE ESCAPE WHEEL TO RELEASE.



F16 16



X  
Y  
Z

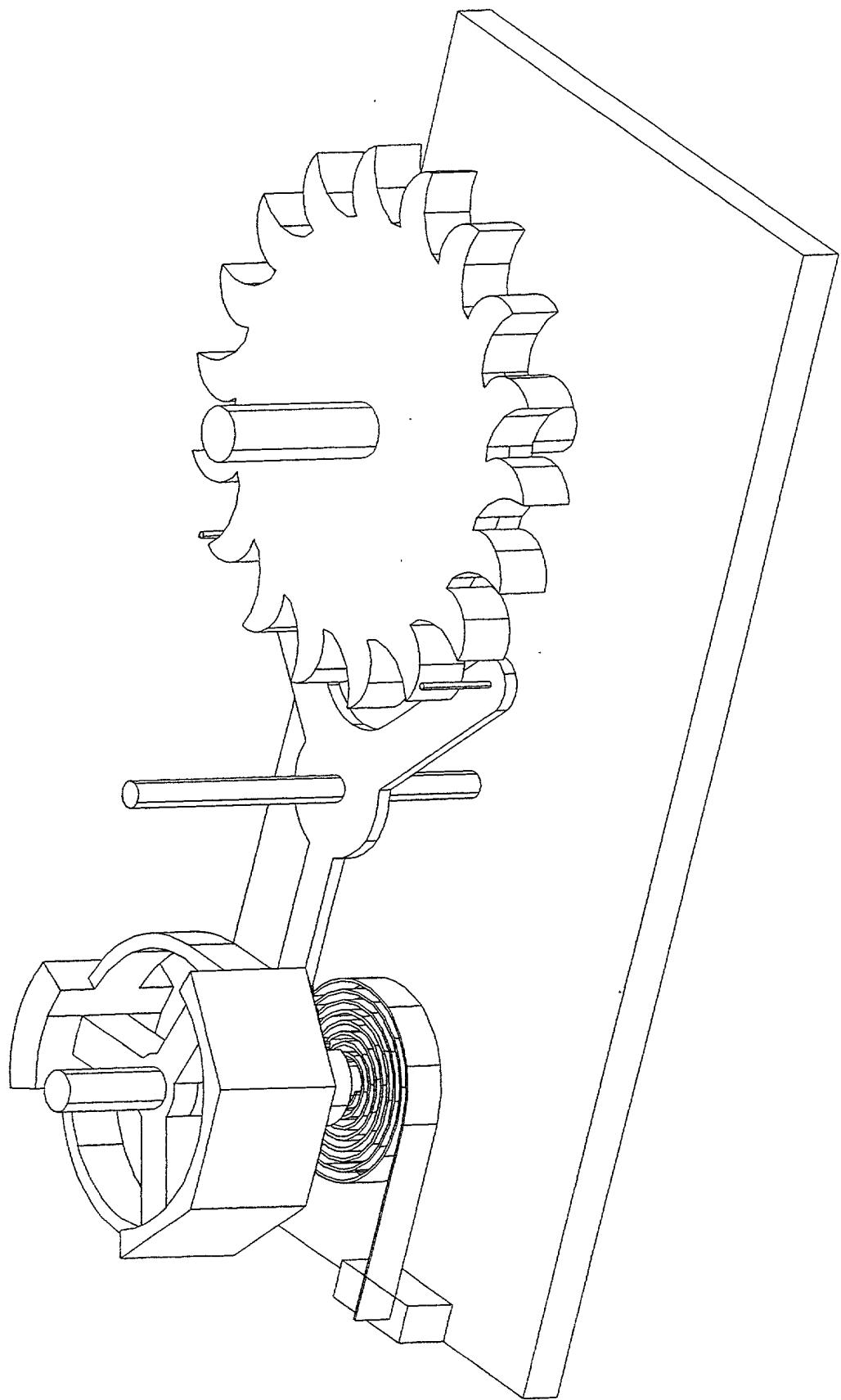
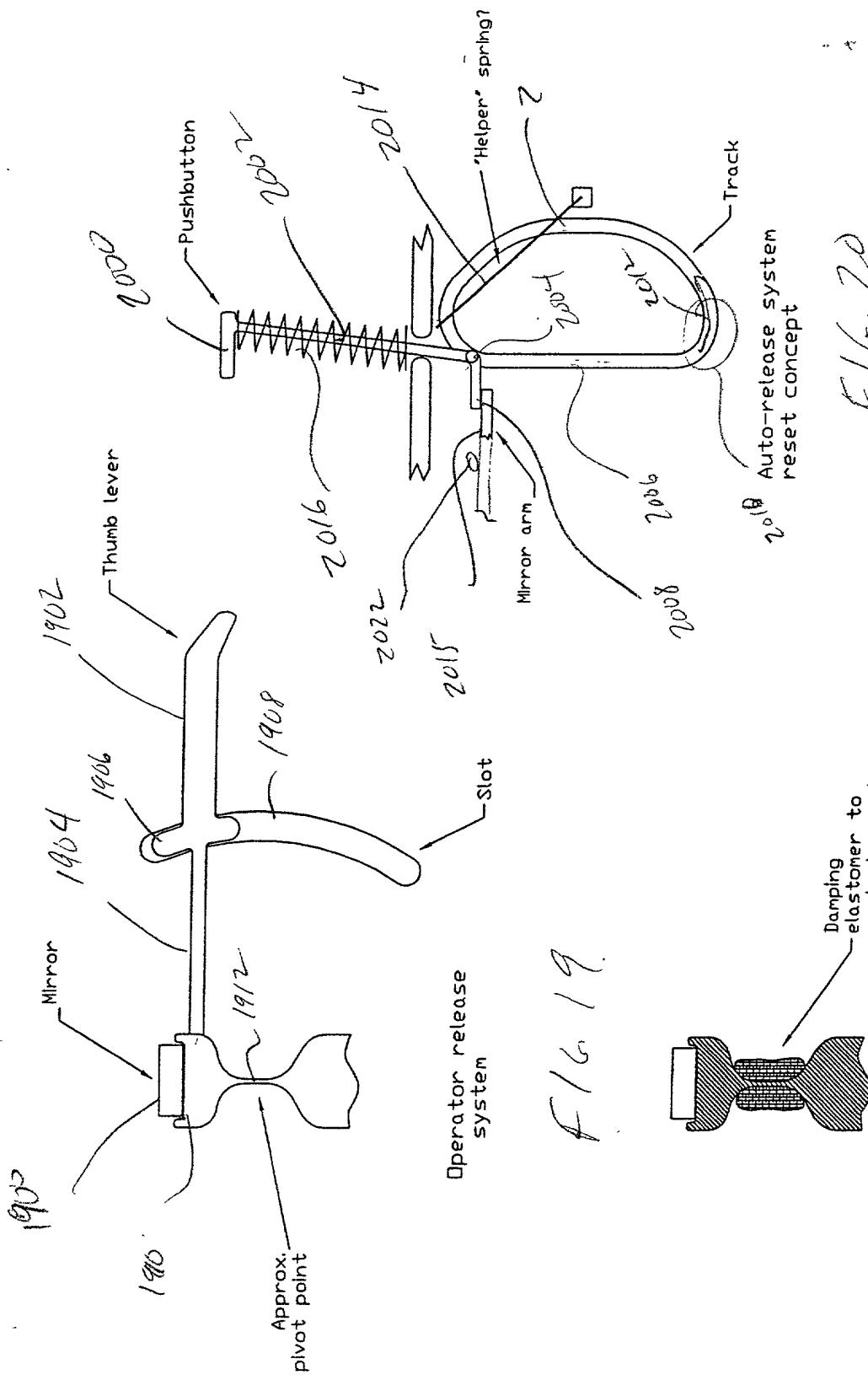


Fig 18



Possible speed and  
acceleration control

TECHNICAL DRAWING

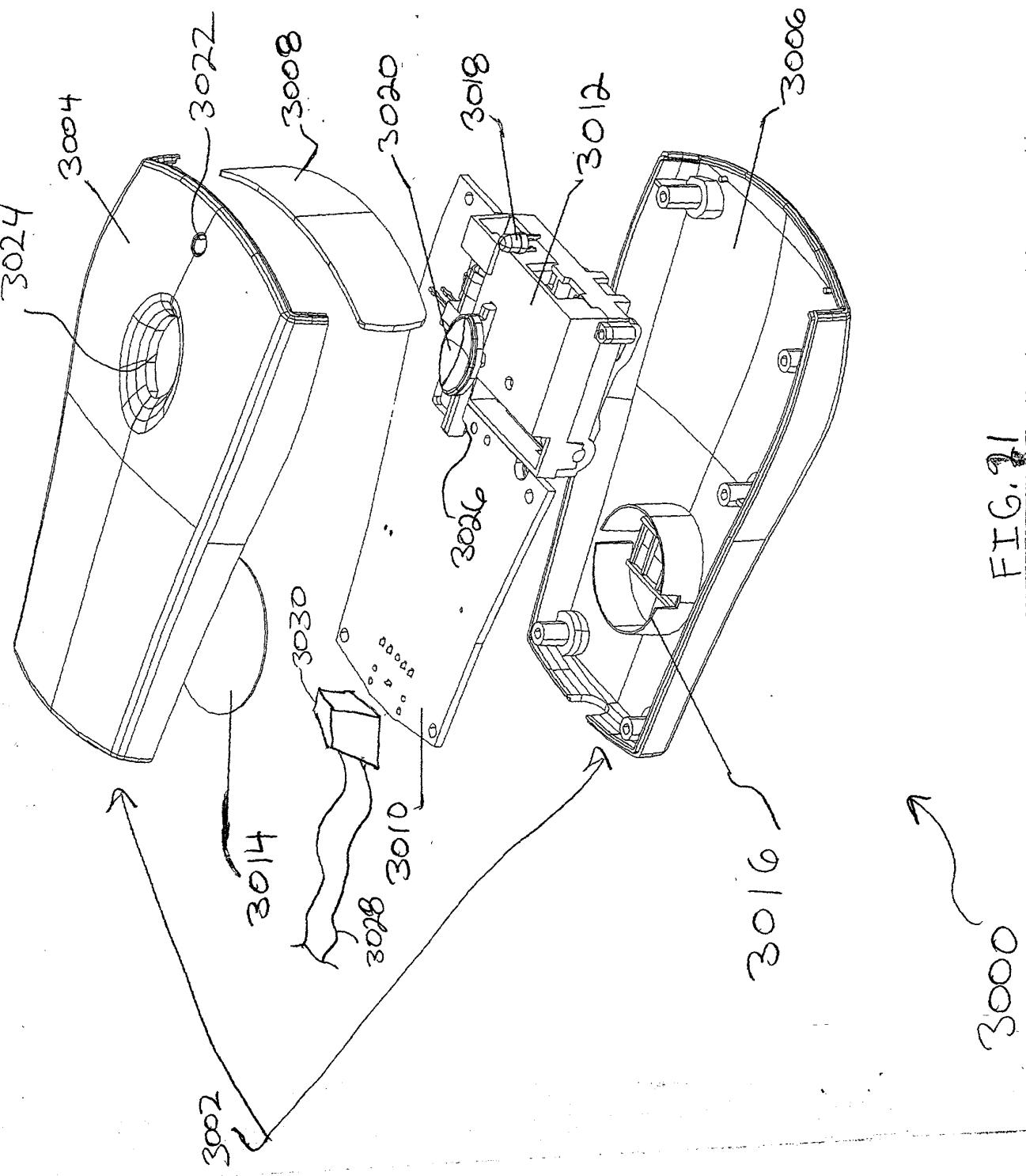
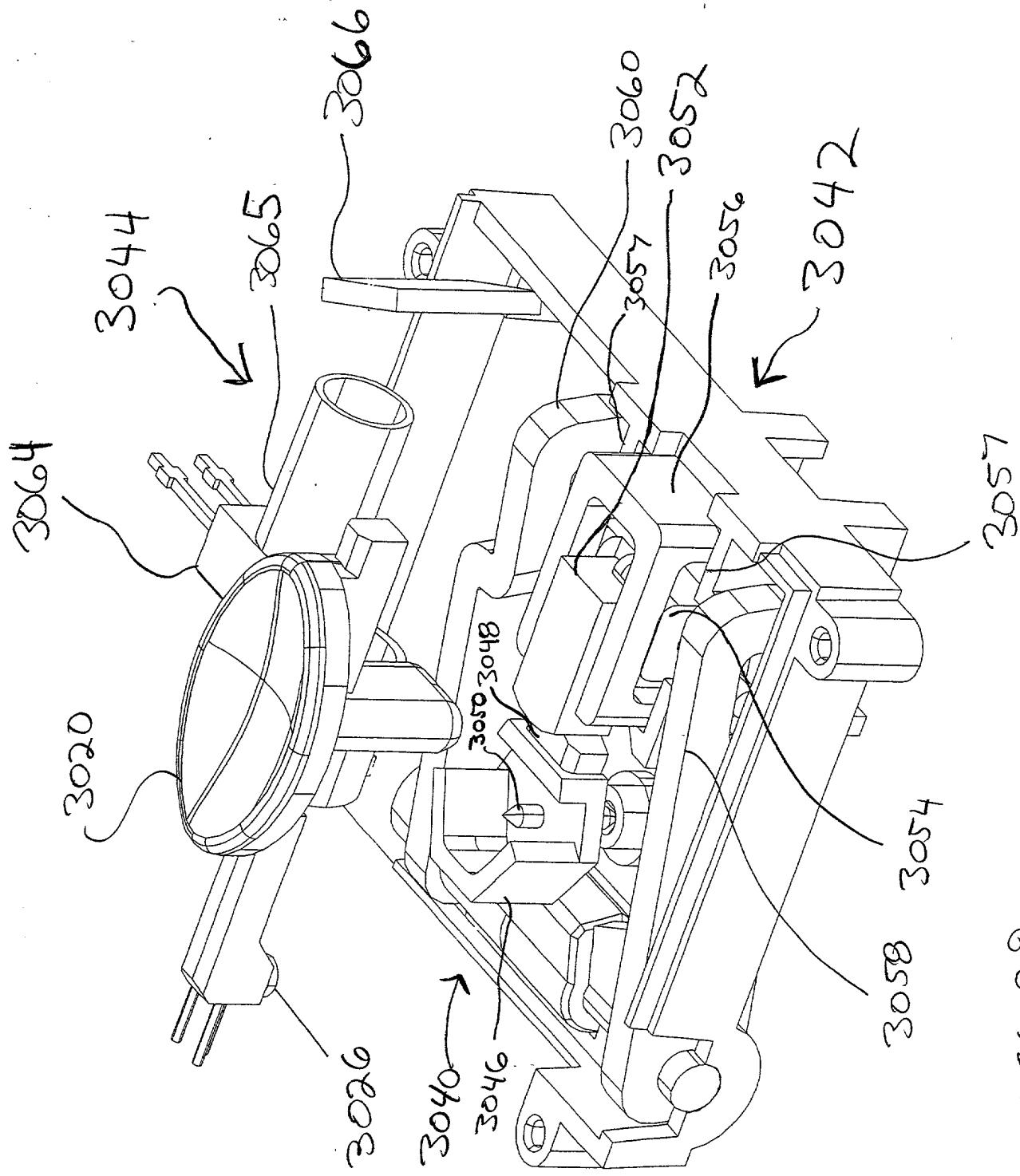


FIG. 71



FT6.22

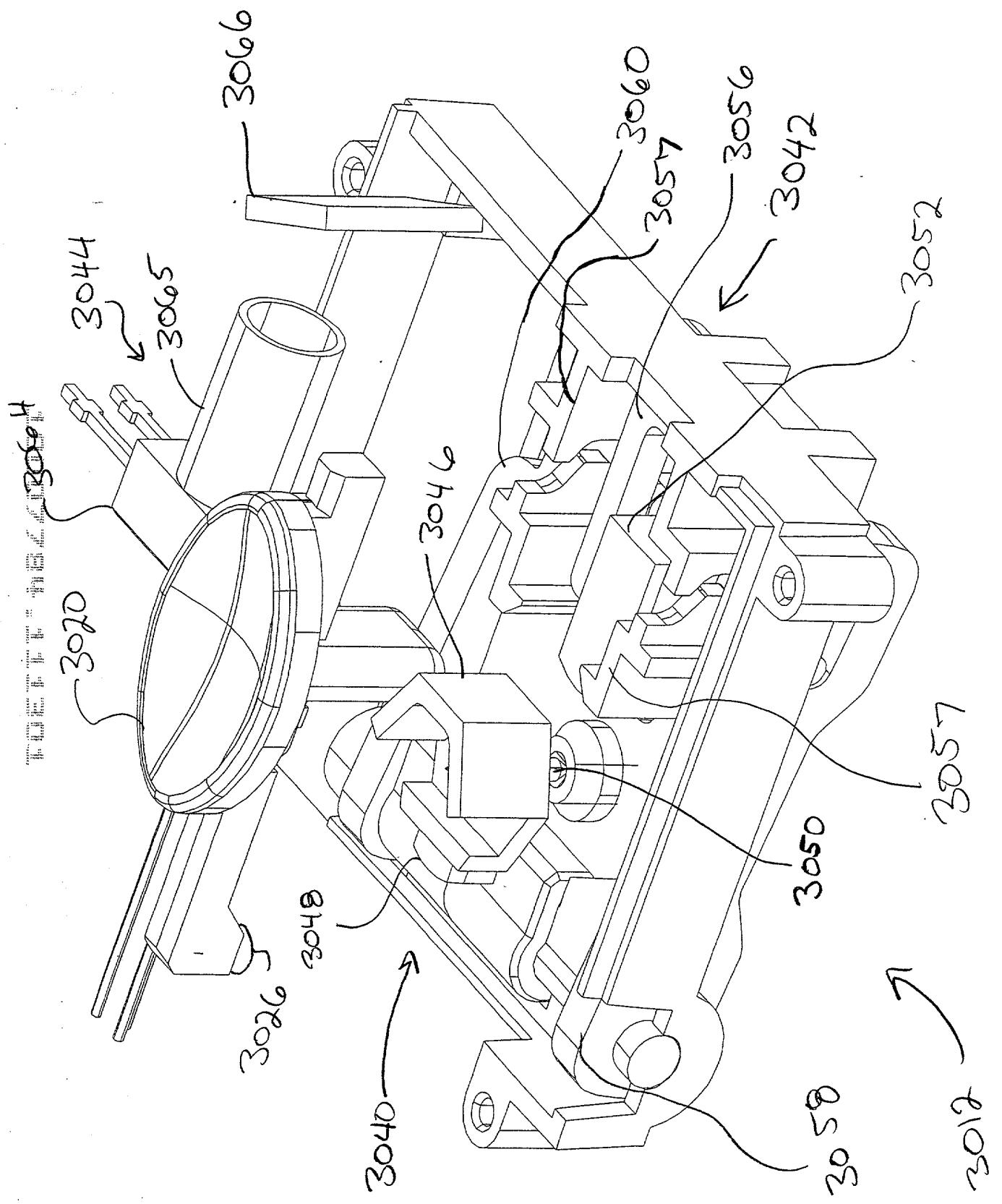


FIG. 23

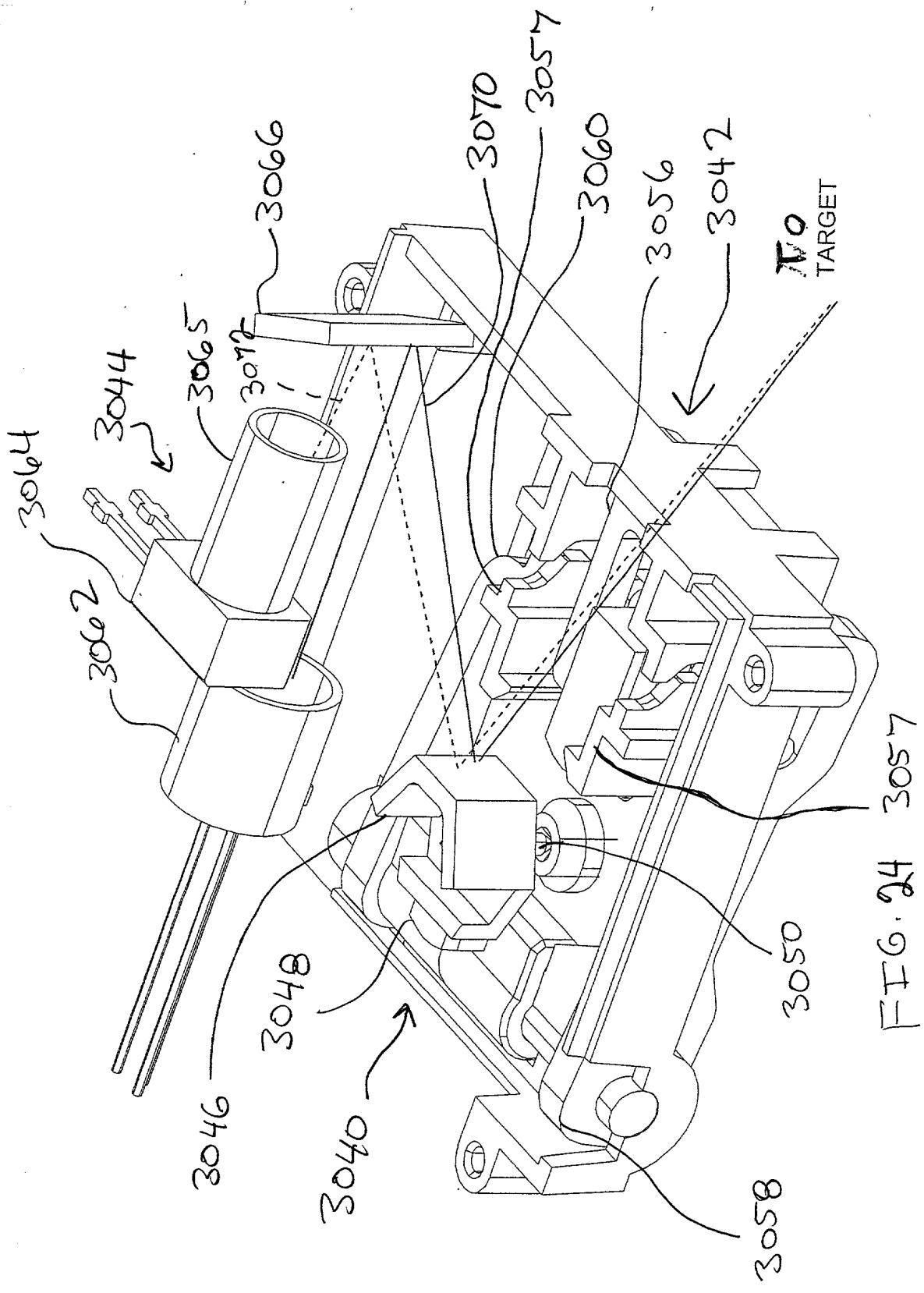


FIG. 24 3057

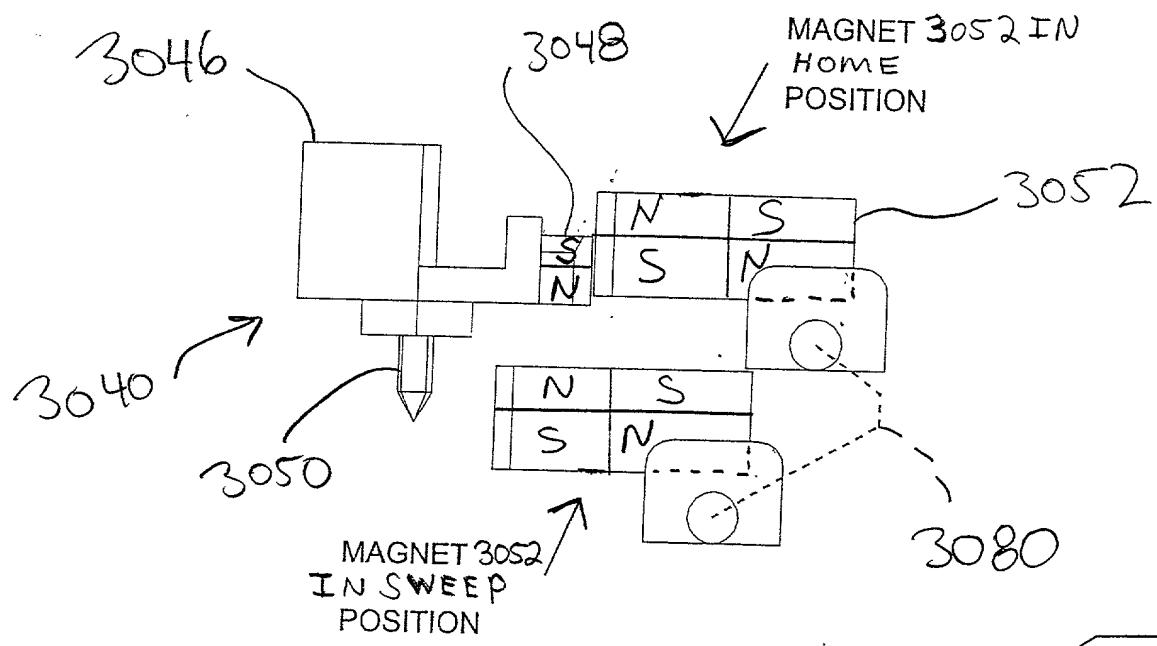


FIG. 25A

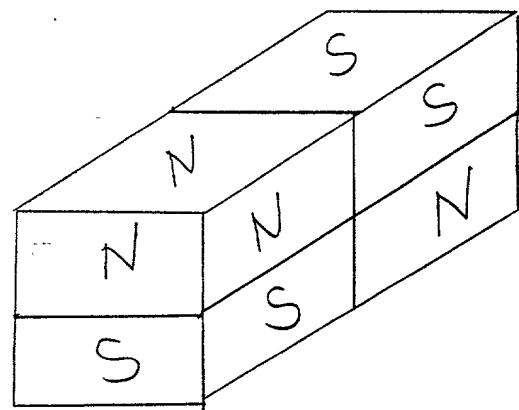


FIG. 25B

FIG. 26

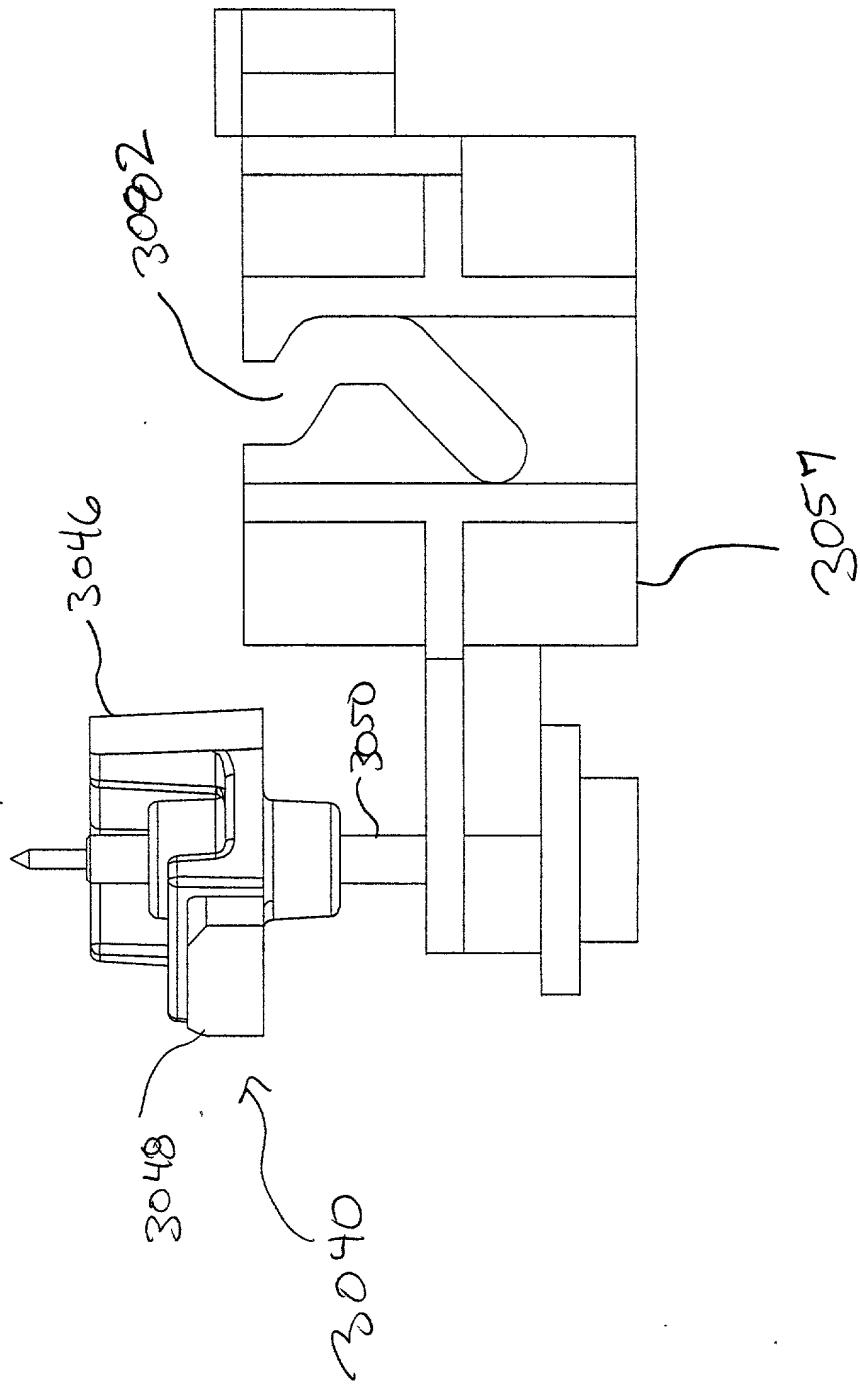
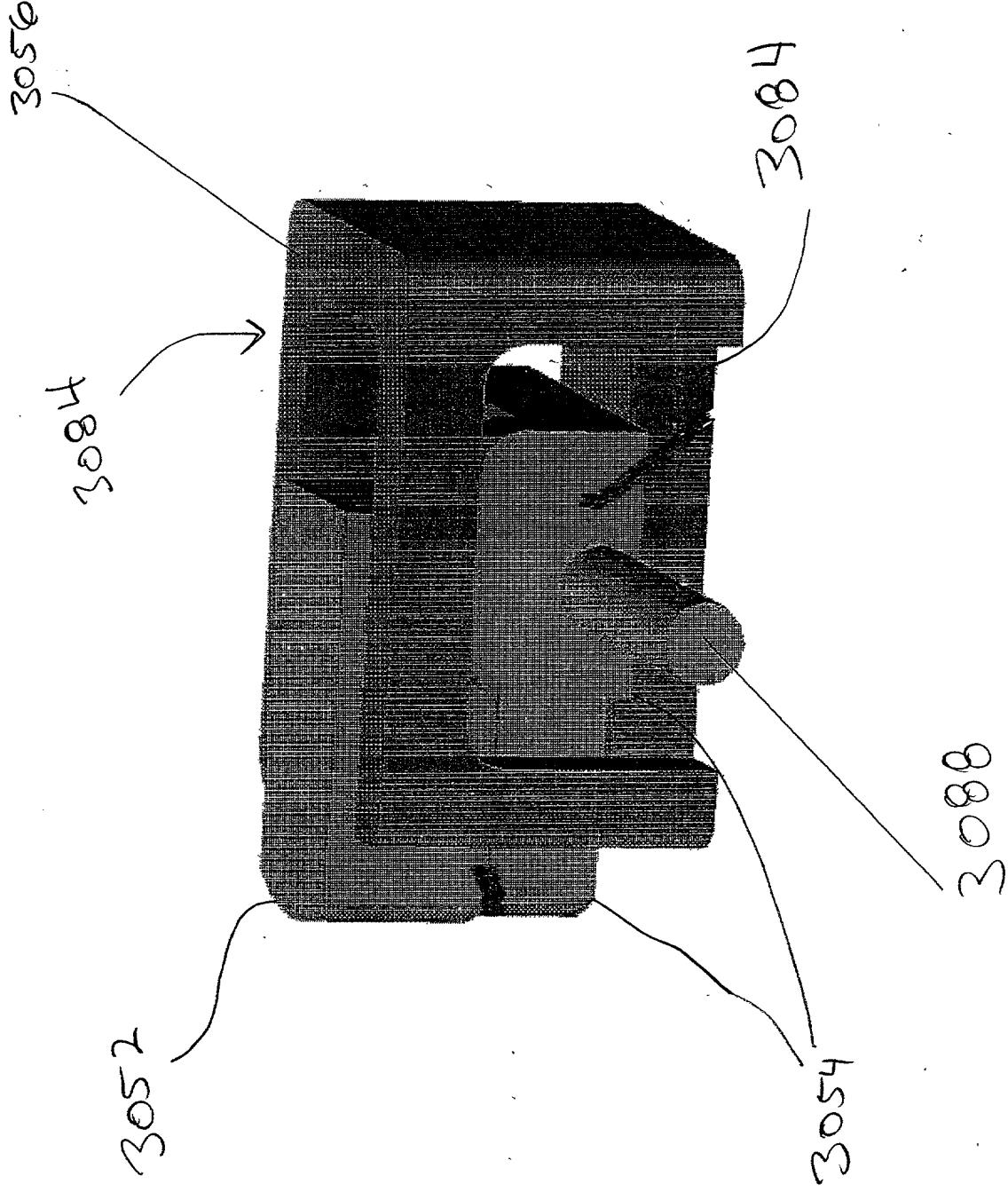


FIG. 27



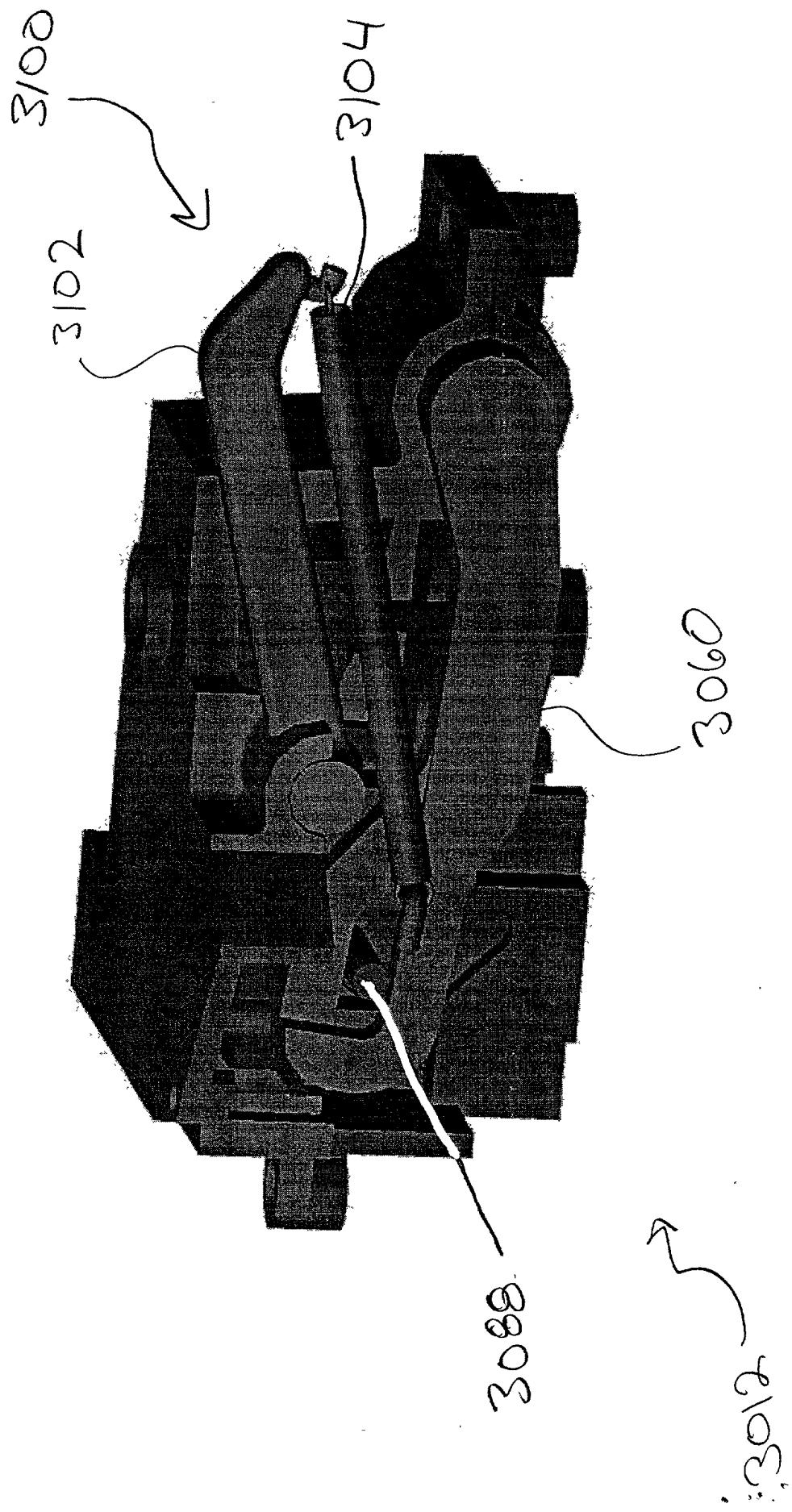


FIG. 28

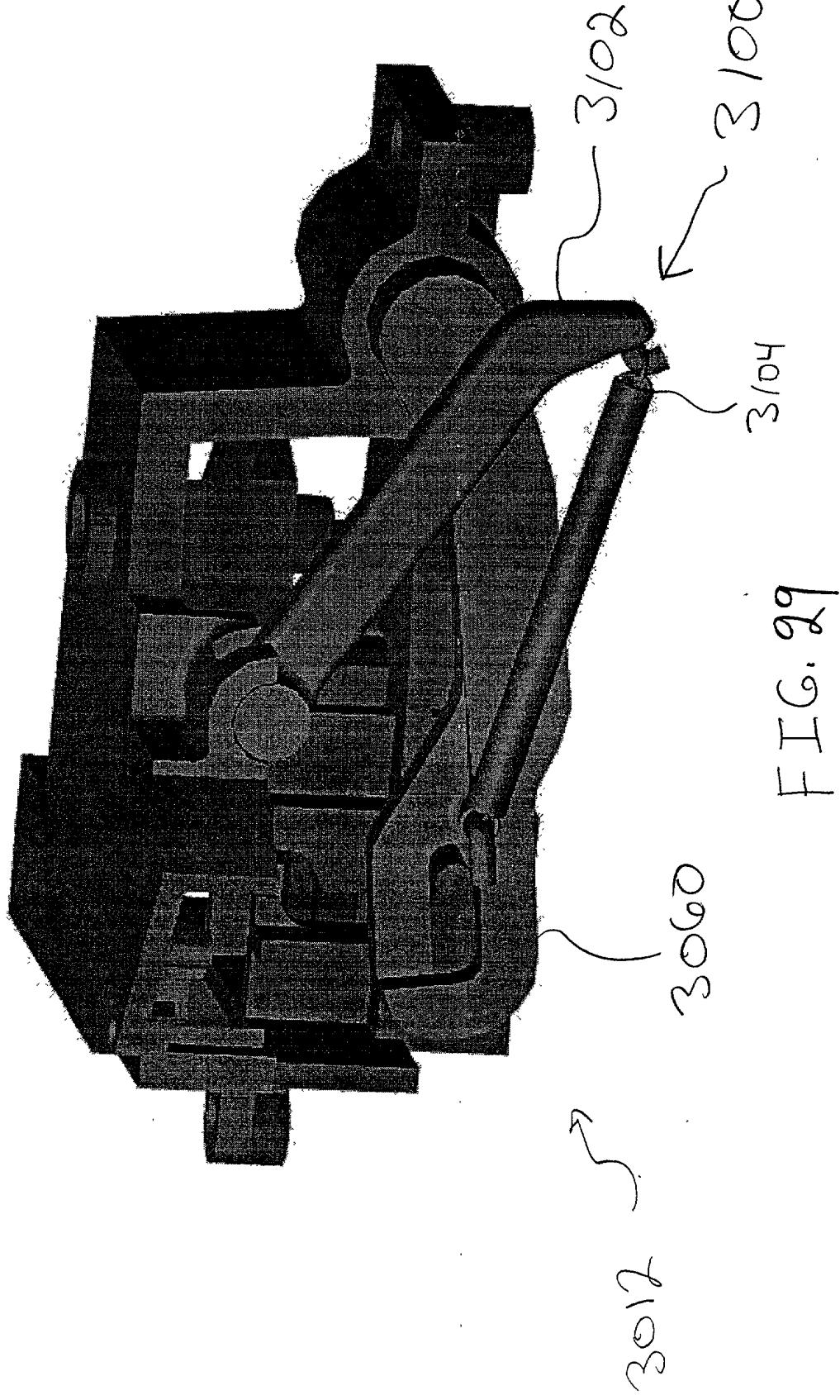


FIG. 29